

reciprocal requirements of the parties. In practice, that will rarely happen and some sort of netting will be required. The exact details of the netting process, whilst outside of the scope of the present invention, are included here for clarity and completeness.

The fundamental netting concept applied in this embodiment is that a computer is programmed with information relating to a party and counterparty transaction, to determine a net payment position if both the first and second transactions occur and to actually complete each transaction on the basis of the net payment position.

This approach can be contrasted with conventional netting, in which a transaction is completed and only subsequently does netting occur to reduce the number and size of payments. Typically, there might be several party/counterparty pairs in a connected series of transactions in the present embodiment.

Multilateral Netting Example

In the present system, it will be seen that the netting step is not simply a stage subsequent to but independent from the underlying exchange transaction, performed for accounting simplicity to reduce the numbers and sizes of cross-payments. Instead, it is an integral part of the underlying exchange transaction between party and counterparty. This is most clearly emphasised when considering a multi-party exchange of currencies. Take, for example, a situation in which there are 3 Corporations - A, B and C. A has CAD and needs JPY; B has JPY and needs USD; C has USD and needs CAD. The exact needs are shown in Figure 2A. A cannot satisfy its requirements in whole or in part by dealing with B exclusively. However, if C can be "linked" into the transaction, all three corporations can be satisfied to the value of the smallest available currency.

We assume that the mid-point of Interbank B/O at a point in time is as follows:
1.53675 CAD; 1 USD; 88.7755 YEN; (i.e. all numbers are relative to the USD base
currency).

The desired amounts indicated on Figure 2A reflect the mid-market value of the
available currency. The post-match situation using this embodiment is shown on
Figure 2B.

It will be noted that the limiting factor in this match example was the availability of
CAD for JPY.

The embodiment uses a "currency link" to match partially or fully the desired
quantities of the match. A currency link is created using the source currency and the
beneficiary (desired) currency for a series of transactions. Figure 2C illustrates a
simple three-way currency link.

Note, that if, for example, Party C wanted a currency other than AAA, say DDD,
there would not be a currency link from which to synthesize a transaction.

A link is therefore defined as (A to B; B to A); or (A to B; B to C; C to A); or (A to
B; B to C; C to D; D to A) etc. A mathematical relationship at a point in time
therefore exists between the currencies. Another example is A to C, B to A and C to
B.

The distinction from traditional netting programs is three-fold. First, netting in the
present embodiment happens in real-time, not at a fixed point in time post
transaction for various parties, none of which are necessarily the same from one

“link” to the next, and consequently, from one “match” (whole or partial) to the next. Second, the program is designed to seek out the “currency linking” in ascending order of the number of potential counter-parties. As complete matches occur (as in A above), the matched party drops out of the matrix. The program seeks out the next currency links based on a set of transactions rules to fulfill wholly or partially the next match. Third, traditional netting occurs on completion of a series of transactions. For example, if Party A is obligated to pay Party B three units of a currency and Party B is obligated to pay Party C three units of a currency, a netting transaction would have Party A pay Party C three units of currency directly. In this embodiment, transactions are synthesized by matching source (available) currency to beneficiary (desired) currency requirements. As such the transaction could be deemed a “netting hybrid”.

The present system may be further understood with reference to Figures 3A and 3B, which each show a schematic of the major elements in a foreign exchange matching system in accordance with the present invention. Figure 3A is an actual proposed architecture schematic for an FX embodiment prepared by Primix Solutions Inc; the embodiment is called ‘BuyFX’. The functions of the major blocks in Figure 3A and 3B are the same and are as follows: the party and counterparty each interact with the foreign exchange matching system using their web browsers (1, 2), which communicate via the Internet 3 with a conventional Web cluster/firewall 4 connected to an application server cluster 5 running Netscape Application Server, IBM WebSphere or BEA WebLogic. Cluster 5 is connected to a message bus 7, such as ActiveWorks or Tibco. The message bus 7 is connected to a live data feed 6, which provides continuous and up to date pricing information. A Reuters or Bloomberg feed could be used. Message bus 7 is also connected to a mail